Exercise Sheet 1: Introduction

Assignment 1.1: What does the following statement(s) do?

1. x = 1
2. x = y
   (Note that y has not been defined before in the current run of Python)
3. 1 = x
4. x = x + 1
5. x += 3
6. x %= 4

Assignment 1.2: This exercise covers types. What is the type of following object(s)?

1. 5
2. 5.0
3. "bingo"
4. 'bingo'
5. """bingo"""
6. ""verb""
7. Verb
8. True

Hint:

1. Python has a function type(obj) which, applied to some object obj, returns its type. E.g. type(-3) will return the type of the object -3.
2. Note that some of above examples will not work, but return an error message. Give reasons.

Assignment 1.3: Place the following texts into a Python strings (for each exercise, use a separate string):

1. Now the winter of our discontent is turned glorious summer.
2. What comes around goes around.
3. Couldn't, Shouldn't, Wouldn't
4. "Impossible, isn't it?", said the cat and vanished.

Assignment 1.4: How do you combine the two strings "Stan Laurel" and "Oliver Hardy" into one string?

Assignment 1.5: How do you do the task of the last assignment separating the names by a space?

Assignment 1.6: How do you create a string "blablablablabla" using a python expression where the letter sequence ***bla*** occurs only once?

Assignment 1.7: Construct a Python expression which prints the last 3 characters of a given string ***s***. Test your expression for a given string. What happens if ***s*** is shorter than 3 characters?

Assignment 1.8: Challenge - In a string such as "Stan Laurel and Oliver Hardy", write an expression that extract the first name of the first person and an expression that extracts the last name of the last person, without assuming that you know them.

Hint: Type the function help(str) in the interactive window of Python to find a string method that splits the string into its non-"whitespace" components.

Assignment 1.9: Challenge - How do you generate the string "blablebliblobla" using only a single occurrence of the sequence ***bl*** in your Python code?